

Hepatica nobilis in its foliage-character stands somewhat intermediate between the two American species, *H. americana* and *H. acutiloba* DC., and in its achenes more strongly suggests the latter species. The leaves of *H. nobilis*, however, are much more obtusely lobed and have less pronounced sinuses between the lobes. Its involucre bracts are more obtuse and its sepals ordinarily broader, so that *H. acutiloba* may appropriately be still maintained as an American species.

Typical *Hepatica americana* has the flowers blue-lavender, but two other conspicuous color-forms are found, one with white sepals and the other with rose-pink. These for convenience may be designated

HEPATICA AMERICANA, forma **candida**, sepalis albis — Frequent throughout the range. TYPE: rocky woods, Townshend, Vermont, April 16, 1912, L. A. Wheeler, in herb. New England Botanical Club.

HEPATICA AMERICANA, forma **rhodantha**, sepalis roseis — TYPE collected by Mrs. Florence van Fleet Lyman, communicated by C. G. Whiting from plants transferred to his garden at Springfield, Massachusetts (specimen in Gray Herb.).

GRAY HERBARIUM.

POLYMNIA UVEDALIA AND ITS VARIETIES.

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WHILE studying recently the variations in pubescence of a Mexican *Polymnia*, I had occasion to examine the abundant material in the Gray Herbarium of the common *P. Uvedalia* to determine whether similar differences were to be found in that species which might throw light on the classificatory value of the variations already noted in the Mexican plant. Somewhat to my surprise, the specimens of *Polymnia Uvedalia* fell readily into three rather distinct varieties of decided geographic trend. The common eastern plant, growing (so far as the material at hand indicates) from New York southward to Georgia, thence north and west to southern Illinois, is always very strongly glandular on the pedicels and branches of the inflorescence with both sessile and stalked glands, and the hispid-pilose hairs common to the other two forms are rare or wanting. A variation represented by

four collections from Florida has much fewer and less conspicuous glands, and intermixed with them a considerable number of hispid-pilose hairs. Plants collected by T. F. Allen, G. H. Shull, and A. B. Seymour at various localities within the range of the typical plant somewhat approach the Floridan form in the presence of hispid-pilose hairs, but are best referred to the typical form on account of the very numerous glands.

West of the Mississippi, from Louisiana to Oklahoma and Texas, occurs a very marked extreme in which the pedicels and to a less degree the branches of the inflorescence are so densely and canescently hispid-pilose that the glands are practically concealed from view. It is interesting to note that one of the specimens of this form, collected by Lindheimer (no. 381), bears this note on the label in Engelmann's hand: "Lindheimer thinks it different from *P. Uvedalia*."

On the Bermuda Islands, where it is certainly introduced and seems to be rapidly naturalizing itself, this form is the only representative of the species. The plant is not noticed in Reade's list of Bermuda plants (1883), and as it is very unlikely that so conspicuous a plant could have escaped his notice, it seems very probable that it is a recent introduction.

The three variations of *Polymnia Uvedalia* may be named and characterized as follows.

* Pedicels and branches of inflorescence densely glandular; hispid-pilose hairs few or none.

POLYMNIA UVEDALIA L. var. genuina. Pedicelli et rami inflorescentiae dense glandulosi, glandulis et sessilibus et stipitatis, pilis hispido-pilosis paucis vel nullis.—*Polymnia Uvedalia* L. Sp. II. ed. ii. 1303 (1763). *Osteospermum Uvedalia* L. Sp. I. ed. ii. 923 (1753). *Polymniastrum Uvedalia* (L.) Small in Small & Carter, Fl. Lanc. Co. 302 (1913).—NEW YORK: western part (*Gray*?). NEW JERSEY: Weehawken, 1864, T. F. Allen. PENNSYLVANIA: Easton, 1869, T. C. Porter. DELAWARE: Wilmington, 1842, E. Tatnell. VIRGINIA: Smith Co., 1892, J. K. Small; Four Mile Run, 1902, G. H. Shull 225. NORTH CAROLINA: Caldwell Co., 1891, Small & Heller; Biltmore, 1897, Biltmore Herbarium 788a. SOUTH CAROLINA: Caesar's Head, 1881, John Donnell Smith. GEORGIA: Early Co., 1901, R. M. Harper 1225. TENNESSEE: Knoxville, 1894, A. Ruth 52; Chilhowee Mts., A. H. Curtiss 1380. KENTUCKY: Harlan Co., 1893, T. H. Kearney, Jr. 251. INDIANA: Orange Co., 1915, C. C. Deam 17347. ILLINOIS: Anna, 1880, A. B. Seymour.

** Pedicels and branches of inflorescence with numerous hispid-pilose hairs more or less concealing the mostly sessile glands.

Var. **floridana**. Pedicelli et rami inflorescentiae sparse glandulosi, glandulis saepissime sessilibus, pilis hispido-pilosis subnumerosis.—FLORIDA: thicket, Brevard Co., Indian River region, 2 Dec. 1902, *A. Fredholm* 5626 (TYPE in Gray Herbarium); Tallahassee, Leon Co., 1895, *G. V. Nash* 2327; Apalachicola, 1897, *Biltmore Herbarium* 788c; without definite locality, *Chapman*.

Var. **densipilis**. Pedicelli et rami inflorescentiae dense canescentesque hispido-pilosi pilis patentibus vel adscendentibus, glandulis inconspicuis.—LOUISIANA: *Hale*. OKLAHOMA: Grand River, Cherokee Nation (Ind. Terr.), 1895, *J. W. Blankinship*. TEXAS: ten feet high, rare on the shady banks of the Guadalupe near New Braunfels, Aug. 1850, *Lindheimer* 381 (TYPE in Gray Herbarium), also 954; Upper Guadalupe River, Aug. 1847, *Lindheimer*. BERMUDA: shaded bank near Tuckers Town, 1905, *Brown & Britton* 321, also 1908, *S. Brown* 470; near Bailey's Bay, 1908, *S. Brown* 494; along roads, Botanic Garden, Paget, 1905, *J. W. Harshberger*; low shaded place, Paget, 1912, *B. L. Robinson* 50.

STOUGHTON, MASSACHUSETTS.

NOTES ON RARE NEW YORK STATE PLANTS.

F. P. METCALF AND L. GRISCOM.

(Continued from page 37.)

JUNCUS CANADENSIS J. Gay., var. **SUBCAUDATUS** Engelm. Saratoga Co.: ditches along R. R., South Corinth, *C. H. Peck* (11), 1879, p. 54. "Not reported from New York State" (18). Oswego Co.: Granny's Orchard, Palermo, 1895, *W. W. Rowlee* (9). Cayuga Co.: swale in woods N. E. end of Duck Lake, Conquest, July 12, 1916, *F. P. Metcalf*, *L. Griscom* (10). Erie Co.: reported in (6).

JUNCUS TORREYI Coville. Oneida Co.: Oneida Lake (11), 1913, p. 25. Fulton Co.: Johnstown, *Olsson & Alexander* (11), 1913, p. 25. Nassau Co.: Long Beach (17). Onondaga Co.: frequent (5). Oswego Co.: collection of *C. S. Sheldon* (11), 1914, p. 25. Cayuga Co.: $1\frac{3}{4}$ miles N. W. of Spring Lake, along roadside, Conquest, August 13, 1916, *F. P. Metcalf*, *L. Griscom*, *A. H. Wright* (10). Seneca Co.: Dumont's Road, Seneca Falls, August 1895, *W. W. Rowlee*, *K. M. Wiegand* (9). Western New York (18). Monroe Co.: Charlotte, *L. Holzer* (11), 1897, p. 281; Long Pond, *Dr. Anna H. Searing* (4); sandy shores of Lake Ontario, *Gray* (2). Niagara Co.: Goat Island, near the River (20). Erie Co.: reported in (6).